



## Tillage Newsletter February 2021

Due to favourable sowing conditions in the autumn there has been a good area of winter crops sown. Crop establishment in general is excellent and crops look to have good yield potential coming into the spring. Some winter crops were quite advanced, and disease was visible before Christmas but thankfully recent cold weather has helped to slow growth and reduce disease pressure.



Winter Barley plant counts are on or above target, early season fertiliser will be important, followed by an application of plant growth regulator to reduce apical dominance and promote tiller survival. The addition of trace elements may be required also. Most winter crops were sprayed with a herbicide in the autumn and weed control looks good apart from some broad leaf weeds; in particular groundsel, fumitory or volunteer beans. These will require a contact herbicide when growth improves.

### Spring Cropping

Thankfully, there is a lot less spring work to be done this compared to 2020.

Reminder that the 3 crop rule is back in play for this season. However on a positive note the protein payment has been extended for 2021. Beans are an important source of natively grown protein feed for use in our feed mill. They are a very good break crop and should be strongly considered when planning spring cropping. They help improve soil structure, leave a nitrogen residue in the soil for the next crop and allow for alternative weed control strategies. It is important to look at the additional margin beans bring to the next crop of Wheat or Barley and not just look at them as a standalone crop. One of the main lessons learned from growing spring crops in 2020 is having a good seed bed and suitable soil fertility is essential for harvesting a high yielding crop. Having correct pH is vital for crops especially spring barley and beans, check your soil tests for lime requirements. Lime will act as a soil conditioner, increasing biological activity in the soil and maximise the availability of nutrients to plants. Calcium lime is generally used unless your soils are deficient Magnesium if so use Magnesium lime.



*Spring Beans*

A fertiliser plan should be completed for all crops at this stage and the plan should be based on crop off takes and soil test results. Organic Manures are a valuable source of nutrition where they can be sourced locally, but remember slurry can be variable and ideally the product should be analysed. Also transport costs and field damage/conditions need to be considered.



The department has announced their intention to fund a scheme where farmers will be incentivised to incorporate straw back into the soil. It's good to see the tillage sector getting some support, however the finer details are still to be announced. A figure of €100 per acre is being mentioned at the moment, this should be taken advantage of to improve soil structure, biology, fertility and reduce weed seed transfer. Lower value straw such as oaten or wheaten should be incorporated. The following considerations should be looked at when making the decision; the cost of straw baling, raking and handling, compaction caused when loading straw and the fertiliser value of the straw. For example the straw from a 3.6 tonne per acre crop of winter oats would have a fertiliser value of €32 per acre plus the priceless benefit of adding organic matter.



**Table 1. Crop Off takes for P and K for Index 3 soils**

Crop	Yield t/ acre	P units/acre	K units/acre	Fertiliser
W Wheat/W Barley	4.45	34	87	4.25 bags/acre 10-8-22+S
Winter Oats	3.65	27	104	4 bags/acre 10-8-25+S
S Wheat/S Barley	3.25	24	73	3 bags /acre 10-8-25+S
Beans	2.6	25	52	3 bags/acre Pulse extra (0-9-18+S+CA)

\*Remember for cereals in index 2 soils add 8 units/acre P and 12 units/acre K

See below for details on spring varieties available from Bretts this year. All these varieties are on the 2021 Department of Agriculture Recommended List.

**Table 2. Spring Varieties Available**

Brett Varieties	Spring Barley			Spring Oats	
Yield Comment	Gangway	Sy Arderin	Sy Errigal	Husky	WPB Isabel
	98	100	100	106	110
	Good yield and excellent grain quality, v good on straw breakdown.	High yielding variety, good disease package.	High yielding variety, best variety on lodging, good disease package.	High yield, good grain quality and strong straw	Highest yielding, excellent straw, top KPH, but Later ripening

\*Spring Beans and Spring Wheat are subject to availability

**Table 3. 2021 Seed Rate Calculator**

It is important to check thousand grain weight (TGW) of seed as it can vary greatly between varieties.

There can be a difference in sowing rate of up 30kg per hectare between varieties.



## 2021 seed rate calculator

\*TGW = Brett Seed 2021

Check each seed lot

Spring Barley					
Sowing Date (week)	Up to Mid March	Mid late March	Early to Mid April	Late April	
Target plants m2	280	300	300	325	
% Establishment	85%	85%	85%	90%	
	<b>TGW*</b>	<b>Kg/ha</b>			
Sy Arderin	58.0	191	205	205	209
Gangway	47.0	155	166	166	170
Sy Errigal	53.0	175	187	187	191
		<b>st/ac</b>			
Sy Arderin	58.0	12.2	13.0	13.0	13.3
Gangway	47.0	9.9	10.6	10.6	10.8
Sy Errigal	53.0	11.1	11.9	11.9	12.2

Beans				
Sowing Date (week)	February	March	April	
Target plants m2	30	32	35	
% Establishment	75%	80%	90%	
	<b>TGW*</b>	<b>Kg/ha</b>		
Lynx	460	184	184	179
Fanfare	605	242	242	235
		<b>st/ac</b>		
Lynx	460	11.7	11.7	11.4
Fanfare	605	15.4	15.4	15.0

Spring Wheat				
Sowing Date (week)	February	Early to Mid March	Mid March to Early April	
Target plants m2	300	325	350	
% Establishment	80%	85%	85%	
	<b>TGW*</b>	<b>Kg/ha</b>		
KWS Starlight	45.00	169	172	185
KWS Talisker	46.00	173	176	189
		<b>st/ac</b>		<b>st/ac</b>
KWS Starlight	45.00	10.7	11.0	11.8
KWS Talisker	46.00	11.0	11.2	12.1

Spring Oats					
Sowing Date (week)	Up to Mid March	Mid late March	Early to Mid April	Late April	
Target plants m2	325	350	350	350	
% Establishment	75%	85%	85%	90%	
	<b>TGW*</b>	<b>Kg/ha</b>			
Husky	38	165	156	156	148
WPB Isabel	40	173	165	165	156
		<b>st/ac</b>			
Husky	38	10.5	10.0	10.0	9.4
WPB Isabel	40	11.0	10.5	10.5	9.9